REMARKS

Examiner Owens is again thanked for his thorough evaluation of the present application. It is again strongly felt that arguments presented regarding independent Claim 19, previously submitted 01/27/03 in response to office action of 01/03/03, clearly distinguish applicant's structure from Examiner's cited prior art, the prior art now consisting specifically of Yamanaka et al (US 6,407,420), in view of Fukase (US 5,656,529), and in view of Iwasaki (US 5,907,772).

The unique structure described by applicant in independent Claim 19, last amended 12/05/01, features a cylindrical storage node structure highlighted by an underlying polysilicon shape supporting an overlying agglomerated metal silicide layer. The key structural feature is the agglomerated metal silicide layer located on all exposed surfaces of the underlying polysilicon shape, however not present on any other surface. Examiner argues that Yamanaka (US 6,407,420), teaches a cylindrical polysilicon shape with vertical polysilicon shapes adjacent to a horizontal, bottom polysilicon shape, while Fukase (US 5,656,529) teaches an agglomerated metal silicide layer, and therefore the combination of these prior art results in applicant's structure being obvious. However, as previously argued applicant's structure shows the agglomerated metal silicide layer on all exposed surfaces of the underlying polysilicon shape, including the agglomerated

metal silicide layer on all sides of, and on top surfaces of the vertical features of the polysilicon shape, as well as on the exposed bottom surface of the bottom of the same underlying polysilicon shape. In contrast the Fukase prior art shows a thick block of polycrystalline tungsten silicide only overlying a block of polycrystalline silicon, certainly not applicants unique structure in which a thin agglomerated layer is located on all surfaces of a cylindricral shaped structure. In addition applicant only desires, and therefore emphatically describes, agglomerated metal silicide only on all surfaces of the cylindrical structure, not present on any other surface of the device. This very attractive feature of agglomerated material located only on all surfaces of a cylindrical structure, (allowing the maximum of surface area of agglomerated metal silicide), is not an easy feature to form via simple process sequences, thus the presence of such a structure is not seen in prior art. One would have to employ a specific process sequence to obtain applicant's structure, (agglomerated metal silicide on all exposed vertical and horizontal features of a cylindrical polysilicon storage node without the presence of the same agglomerated metal silicide on non-polysilicon surfaces), therefore applicant's structure remains unique. Surely if one's objective is to increase surface area applicant's structure would be the ultimate example. Since applicant's structure remains unique, (thin agglomerated metal silicide on all surfaces of a cylindrically shaped underlying polysilicon structure

and not located on any other surface), the combination of the Yamanaka in view of the Iwasaki and Fukase prior art did not lead to applicants structure, and thus applicant's structure is not an obvious consequence of these prior art. The fact that neither prior art with the same objective as applicant, or subsequent prior art with the privilege of seeing the Yamanaka, Iwasaki and Fukase prior art, arrived at applicant's desirable and unique structure, shows that applicant's unique structure was, or is not obvious via a combination of the prior arts. Again none of the prior art shows agglomerated metal silicide only on all vertical and horizontal features of a cylindrical polysilicon structure.

Therefore it is felt that applicant's structure, described in previously amended independent Claim 19, is novel and unique, when compared to Examiner's cited prior art. Applicants use of a combination of features such as: a storage node structure comprised of an cylindrical polysilicon shape featuring uniformly doped vertical shapes completely covered by an agglomerated metal silicide layer on all exposed vertical and horizontal features, is clearly distinguishable, and novel, when compared to Examiner's cited prior art. No combination of the prior art can claim applicant's unique structure. The feature of locating agglomerated metal silicide only on exposed surfaces of the cylindrical polysilicon shape and not on any other surface, is not easily obtainable and therefore not previously described in prior art.

Therefore it is strongly felt that no combination of prior arts can be used to describe applicants structure. Applicant has claimed his process in detail. The structure described in Figs. 1 - 10, and in Claims 19 and 21, are both believed to be novel and patentable over these various references, because there is not sufficient basis for concluding that the combination of claimed elements would have been obvious to one skilled in the art. We therefore request Examiner Owens to reconsider his rejections of independent Claim 19, and of dependent Claim 21, referencing amended independent Claim 19, in view of these arguments.

Allowance of all claims is requested.

Attached hereto is last version of the Claims

It is requested that should Examiner Owens not find that the Claims are now Allowable that he call the undersigned attorney at 845-452-5863, to overcome any problems preventing allowance.

Respectfully submitted,

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"Version of Claims with last changes made"

Claim 19. (previously amended A cylindrical shaped, capacitor structure, featuring a cylindrical storage node structure comprised of an underlying, uniformly doped, cylindrical polysilicon shape and an overlying agglomerated metal silicide layer, comprising:

said cylindrical polysilicon shape comprised of a bottom polysilicon shape located on a first section of a top surface of an underlying planar, insulator layer, with said bottom polysilicon shape overlying and contacting a top surface of a plug structure which in turn is located in an opening in said insulator layer, and with said cylindrical polysilicon shape comprised of uniformly doped, vertical polysilicon shapes, located overlying second sections of said planar, insulator layer, with bottom portions of said vertical polysilicon shapes butting edges of said bottom polysilicon shape;

said agglomerated metal silicide layer, with a roughened top surface, located on exposed portions of said cylindrical polysilicon shape, featuring agglomerated metal silicide on top surface of said bottom polysilicon shape, and on all surfaces of uniformly doped, said vertical polysilicon shapes, resulting in said cylindrical shape storage node structure comprised of said agglomerated metal silicide layer on said cylindrical polysilicon shape;

a capacitor dielectric layer located on the exposed surfaces of said cylindrical shape storage node structure; and

an upper electrode, covering said capacitor dielectric layer.

Claim 20 (previously canceled) The semiconductor capacitor structure of Claim 19, wherein said silicon layer comprises vertical polysilicon shapes connected by a horizontal polysilicon shape.

Claim 21 (original) The semiconductor capacitor structure of Claim 19, wherein said metal silicide layer is selected from a group consisting of titanium silicide, cobalt silicide, nickel silicide, and platinum silicide.